PM Conformity Hot Spot Analysis
Project Summary Form for Interagency Consultation

The purpose of this form is to provide sufficient information to allow the Transportation Conformity Working Group (TCWG) to determine if a project requires a project-level PM hot spot analysis pursuant to Federal Conformity Regulations.

The form is not required under the following circumstances:

1. The project sponsor determines that a project-level PM hot spot analysis is required or otherwise elects to perform the analysis; or
2. The project does not require a project-level PM hot spot analysis since it:
    a. Is exempt pursuant to 40 CFR 93.126; or
    b. Is a traffic signal synchronization project under 40 CFR 93.128; or
    c. Uses no Federal funds AND requires no Federal approval; or
    d. Is located in a Federal PM attainment area (note: PM10 and PM2.5 areas differ).

Projects other than those listed above may or may not need a project-level PM hot spot analysis depending on whether it is considered a "Project of Air Quality Concern" (POAQC), and should be brought before the TCWG for a determination.

It is the responsibility of the project sponsor to ensure that the form is filled out completely and provides a sufficient level of detail for the TCWG to make an informed decision on whether or not a project requires a project-level PM hot spot analysis. For example, the TCWG will be reviewing the effects of the project, and thus part of the required information includes build/no build traffic data. It is also the responsibility of the project sponsor to ensure a representative is available to discuss the project at the TCWG meeting if necessary.

Instructions:

1) Fill out form in its entirety. Enter information in gray input fields.

2) Be sure to include RTIP ID#. See http://scag.ca.gov/rtip/ if necessary.

3) Submit completed form to your local Transportation Commission who will submit it to the MPO. Caltrans projects can be submitted by Caltrans District representative.

The TCWG meets the fourth Tuesday of each month at SCAG Headquarters, 818 W. 7th Street, 12th Floor, Los Angeles, CA 90017. Participation is also available via teleconference. Call (213) 236-1800 prior to meeting to get the call-in number and pass-code.

Forms must be submitted by the second Tuesday of the month to be considered at that month's TCWG meeting.

REFERENCE

Criteria for Projects of Air Quality Concern (40 CFR 93.123(b)(1)) – PM_{10} and $PM_{2.5}$ Hot Spots

(i) New or expanded highway projects that have a significant number of or significant increase in diesel vehicles;

(ii) Projects affecting intersections that are at Level-of-Service D, E, or F with a significant number of diesel vehicles, or those that will change to Level-of-Service D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project;

(iii) New bus and rail terminals and transfer points than have a significant number of diesel vehicles congregating at a single location;

(iv) Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location; and

(v) Projects in or affecting locations, areas, or categories of sites which are identified in the PM10 or PM2.5 applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

Links to more information:

http://www.fhwa.dot.gov/environment/conform.htm

http://www.epa.gov/otaq/stateresources/transconf/index.htm

TABLE 1
Type of Project

- New state highway
- Change to existing state highway
- New regionally significant street
- Change to existing regionally significant street
- New interchange
- Reconfigure existing interchange
- Intersection channelization
- Intersection signalization
- Roadway realignment
- Bus, rail, or inter-modal facility/terminal/transfer point
- Truck weight/inspection station
- At or affects location identified in the SIP as a site of actual or possible violation of NAAQS

RTIP ID# *(required)* SBD55022

Project Description *(clearly describe project)*

Cypress Avenue –Interstate 10 Four-Lane Grade Separated Overcrossing Project: The project would include the construction of a new four-lane grade separation (i.e., overcrossing) on Cypress Avenue across Interstate 10 (I-10) in the County of San Bernardino and City of Fontana (see Figures 1 and 2, attached). The new overcrossing would extend southward from a point approximately 100 meters (328 feet) north of the intersection of Cypress Avenue and Valley Boulevard to a point approximately 94 meters (308 feet) south of the intersection of Cypress Avenue and Slover Avenue. Cypress Avenue would be widened to four lanes (two northbound and two southbound) along the existing centerline, and an overcrossing structure would be built over the I-10, Mulberry Channel, and the UPRR tracks (see Figures 3 and 4, attached). This overcrossing would connect Cypress Avenue where it is currently divided by the I-10. The widened Cypress Avenue would consist of a 3.6-meter (12-foot) inside lane and a 5.1-meter (17-foot) outside lane with a striped median that would vary from 1.2 meters (4 feet) to 3.6 meters (12 feet). It also would have a 1.98-meter (6.5 foot) concrete sidewalk with curb and gutter in each direction. This project would provide a Class II bike lane (striped bicycle lane on the roadway) on Cypress Avenue from Valley Boulevard to Slover Avenue, which would connect to the county trail system at San Bernardino Avenue and Santa Ana Avenue.

At the Valley Boulevard intersection, south of Valley Boulevard, Cypress Avenue would consist of two northbound left-turn lanes, one northbound right turn lane, one northbound through lane, and two southbound lanes. To the north of Valley Boulevard, Cypress Avenue would consist of one southbound shared through/right-turn lane and one southbound left-turn lane. Along Valley Boulevard there would be two through lanes in each direction (east and west) along with a left-turn lane in each direction and right-turn pocket in the eastbound direction. At the Slover Avenue intersection, north of Slover Avenue, Cypress Avenue would have one southbound through lane, two southbound left turn lanes, one southbound right-turn lane, and two northbound lanes. To the south of Slover Avenue, Cypress Avenue would have one northbound through lane, one northbound left-turn lane, and one southbound through lane. Along Slover Avenue in the westbound direction, there would be two through lanes, one left-turn lane, and one right-turn lane, while in the eastbound direction, there would be one through lane, two left-turn lanes, and one shared through/right-turn lane.

In conjunction with the proposed Cypress Avenue improvements, there would be some modifications to the local traffic circulation. On the north side of I-10, the Cypress Avenue/Taylor Avenue intersection would be closed and a new intersection would be created approximately two parcels south of the existing intersection. A new north-south road would parallel Cypress Avenue to the west and connect to Washington Drive at the south end and to Taylor Avenue at the north end. No modifications to Washington Avenue are anticipated. South of I-10, Boyle Avenue would be terminated on both sides of Cypress Avenue. Embankment slopes (1:2 vertical to horizontal) at both approaches of the Cypress Avenue overcrossing would be constructed, except for where a retaining wall would be constructed at one parcel located between Slover Avenue and Boyle Avenue.

The proposed Cypress Avenue Overcrossing Project is included in the final adopted 2006 Regional Transportation Improvement Plan (RTIP) (FHWA approval date October 2, 2006) as project number SBD55022. The proposed project would be funded by a combination of federal, state, and local funds.

Type of Project *(use Table 1 on instruction sheet)*
New overcrossing bridge structure.

County	**Narrative Location/Route & Postmiles** Cypress Avenue at I-10, City of Fontana; 07-SB-0
San Bernardino	**Caltrans Projects – EA# 46770**

Lead Agency: City of Fontana

Contact Person	**Phone#**	**Fax#**	**Email**
Paul Fagan	(909) 383-5902	(909) 383-6938	paul_fagan@dot.ca.gov

Hot Spot Pollutant of Concern *(check one or both)* **PM2.5** X **PM10** X

Federal Action for which Project-Level PM Conformity is Needed *(check appropriate box)*

Categorical Exclusion (NEPA)	**EA or Draft EIS**		**FONSI or Final EIS**	**PS&E or Construction**	**Other**
		X			

Scheduled Date of Federal Action:

Current Programming Dates *as appropriate*

	PE/Environmental	**ENG**	**ROW**	**CON**
Start	July 2005 (restart)	10/2006	10/2006	1/2008
End	April 2006	12/2007	10/2007	9/2009

Project Purpose and Need (Summary): *(attach additional sheets as necessary)*
Through the project, Cypress Avenue is heavily developed for the most part, and the land use surrounding the project area is predominantly residential with some commercial properties. Local and through traffic use the Sierra Avenue and Citrus Avenue interchanges to the east and west of Cypress Avenue, respectively, to either access or traverse I-10. High traffic volumes at these interchanges and at local arterial intersections in the project area contribute to deficient operating conditions, increased congestion, additional vehicle delay, and reduced safety. The heavy congestion at the interchanges results in significant spillover traffic along residential streets, which threatens the residential character and safety of these neighborhoods. Additionally, it is anticipated that traffic will continue to increase at the Sierra Avenue and Citrus Avenue interchanges as new growth and development occurs in the City and the region. Consequently, the objective of the proposed project is to provide an additional access route across I-10 to reduce congestion and improve safety at the Citrus Avenue and Sierra Avenue interchanges, the adjacent interchanges along I-10 to the west and east, respectively.

Surrounding Land Use/Traffic Generators *(especially effect on diesel traffic)*
The land uses surrounding the project area are predominantly residential with some commercial properties. To the south of I-10, there is the Union Pacific Railroad (UPRR) line located directly parallel to the freeway.

The City's General Plan Land Use Map identifies the areas within the project area as general commercial (C-G) and light industrial (I-L) to the north of I-10 and general industrial (I-G) and light industrial (I-L) to the south of I-10. Subsequently, the residential uses along the proposed project corridor are nonconforming. The City recognizes that there are air quality sensitive land uses (i.e., residences) that are incompatible with the land use designations that exist within the project corridor. Subsequently, through this area the City is phasing out these non-conforming land uses and is not permitting the construction of any new residential or other air quality sensitive land uses.

Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

No Available Data

RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility
Year 2030 No Build: N/A

Year 2030 Build: AADT = 23,900; % trucks = 8; truck AADT = 1,912

Source: Meyer, Mohaddes Associates: Cypress Avenue Overcrossing at Interstate 10 Project Report Traffic Analysis, May 2005.

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

No Available Data

RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

Year 2030 Project Site Intersection Comparison				
Project Site Intersection	AM Peak Hour		PM Peak Hour	
	No-Build	Build	No-Build	Build
Cypress Avenue and Valley Boulevard	F	C	F	C
Cypress Avenue and Slover Avenue	B	C	F	C

Cypress Avenue: AADT = 23,900; % trucks = 8; truck AADT = 1,912
Valley Boulevard: AADT = 14,780; % trucks = 8; truck AADT = 1,182
Slover Avenue: AADT = 9,310; % trucks = 8; truck AADT = 745

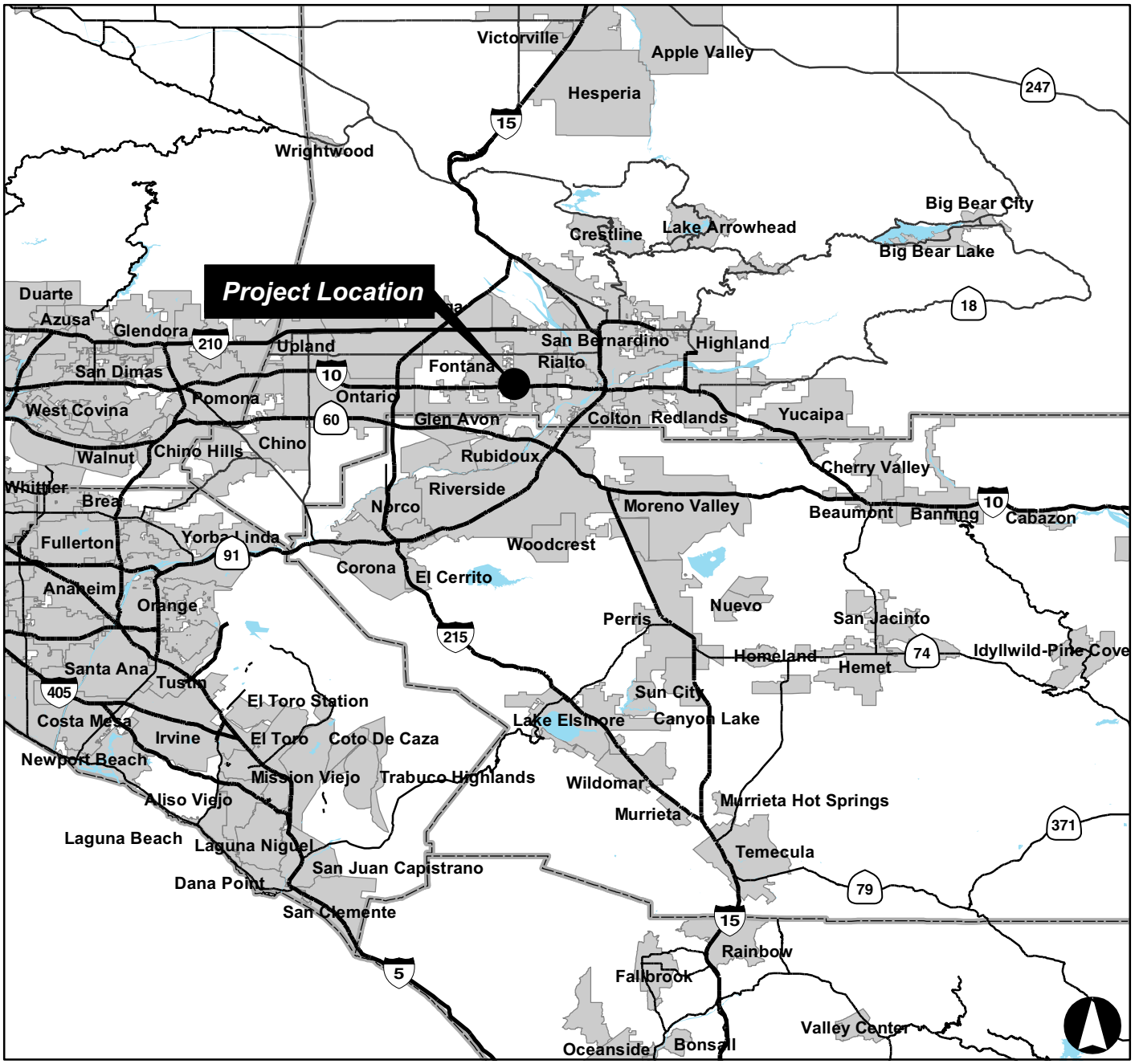
Source: Compiled by Jones & Stokes, based on data provided in project traffic report prepared by Meyer, Mohaddes Associates, May 2005. Cypress Avenue Overcrossing at Interstate 10 Project Report Traffic Analysis.

Describe potential traffic redistribution effects of congestion relief *(impact on other facilities)*
By constructing a four-lane grade separated overcrossing structure at the I-10 on Cypress Avenue and widening Cypress Avenue at Valley Boulevard and Slover Avenue, the proposed project will provide an additional access route across I-10 to reduce congestion and improve safety at adjacent interchanges, and reduce response times for emergency service vehicles by reducing congestion on roadways crossing I-10, thereby improving the efficiency of public safety and health service delivery.

Comments/Explanation/Details *(attach additional sheets as necessary)*
EPA specifies in 40 CFR 93.123(b)(1) that only "projects of air quality concern" are required to undergo a PM2.5 and PM10 hot-spot analysis. EPA defines projects of air quality concern as certain highway and transit projects that involve significant levels of diesel traffic or any other project that is identified by the PM2.5 State Implementation Plan (SIP) as a localized air quality concern. A discussion of the proposed project compared to projects of air quality concern, as defined by 40 CFR 93.123(b)(1), is provided below:

1. New or expanded highway projects that have a significant number of or significant increase in diesel vehicles. The above-referenced guidance document cites a two-step criteria to identify "a significant volume of diesel truck traffic." The first criterion is facilities with greater than 125.000 annual average daily traffic (AADT) volumes. If criterion is met, criterion two is that eight percent (8 percent) or more of said traffic volumes (i.e., 10,000 vehicles) are diesel truck traffic volumes. Along the project limits of Cypress Avenue during year 2030, AADT volumes are forecast to be approximately 23,900 trips, of which eight percent, or 1,912 trips, would be diesel truck volumes. As these AADT volumes are considerably lower than the above-mentioned screening-level threshold criteria of 125,000 and 10,000 for total AADT traffic volumes and diesel truck traffic volumes, respectively, the project would not result in a significant number of, or significant increase in, diesel vehicles.
2. Projects affecting intersections that are at a level-of-service (LOS) D, E, or F with a significant number of diesel vehicles or those that will change to LOS D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project. Overall, intersection LOS would improve under the Build Alternative, when compared to the No-Build Alternative. A project site intersection LOS comparison is provided on the previous page, which shows that the project would not degrade any intersections that are at LOS D, E, or F.
3. New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location. The proposed project has no bus or rail terminal component, nor would it alter travel patterns to/from any existing bus or rail terminal.
4. Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location. The proposed project would not expand any bus terminal, rail terminal, or related transfer point that would increase the number of diesel vehicles congregating at any single location.
5. Projects in or affecting locations, areas, or categories of sites that are identified in the PM2.5 and PM10 applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation. The project site is not in or affecting an area or location identified in any PM2.5 or PM10 implementation plan. The immediate project area is not considered to be a site of violation or possible violation.

The discussion provided above indicates that the proposed project would not be considered a Project of Air Quality Concern, as defined by 40 CFR 93.123(b)(1). Therefore, PM2.5 and PM10 hot-spot evaluations are not required. It is unlikely that the proposed project would generate new air quality violations, worsen existing violations, or delay attainment of national AAQS for PM2.5 or PM10. Clean Air Act 40 CFR 93.116 requirements are met without an explicit hot-spot analysis.

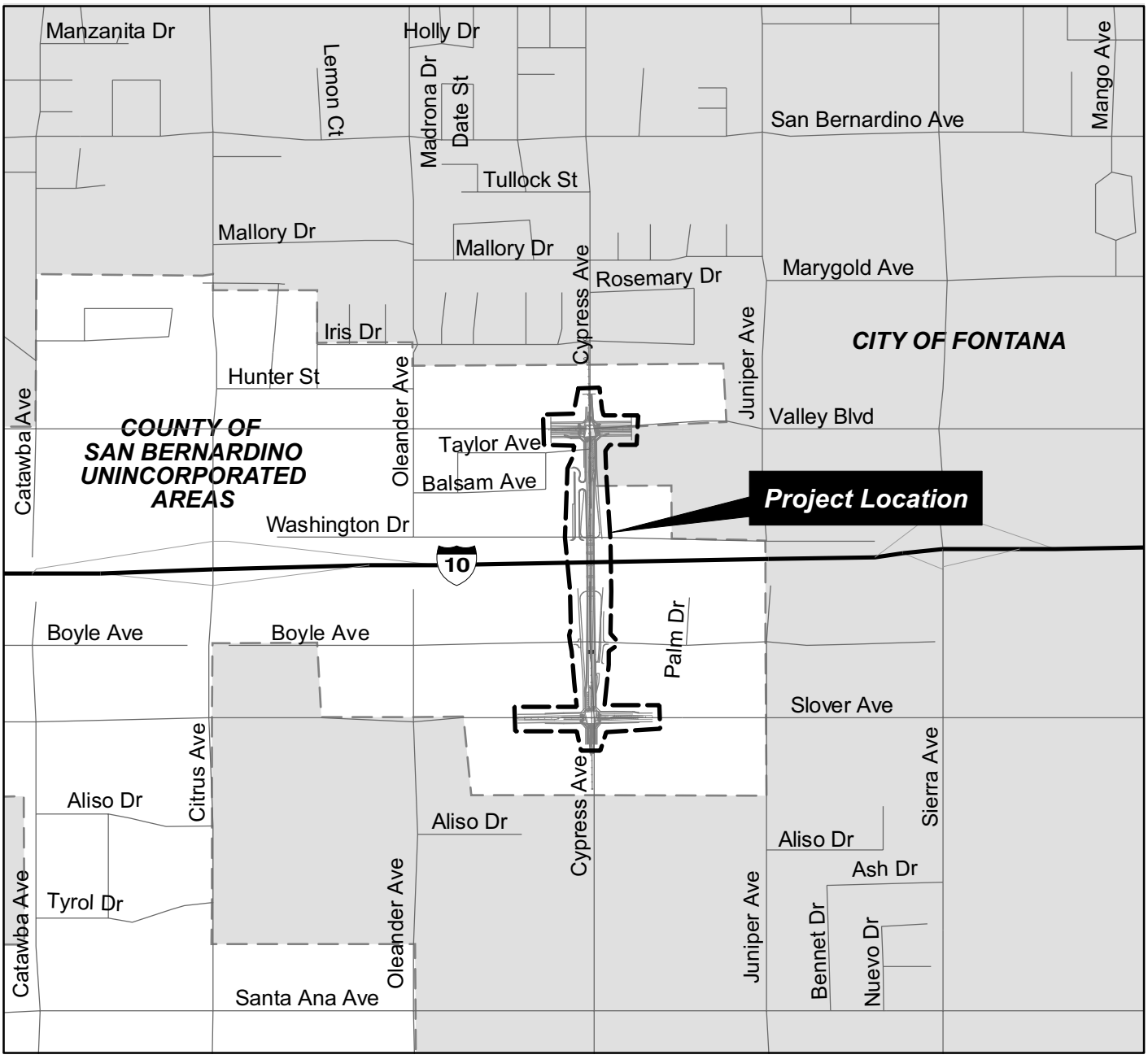


Source: US Census Bureau TIGER Data, 2000.

0 2.5 5 10 15 20 Miles

0 3.5 7 14 21 28 Kilometers

Figure 1
Regional Vicinity Map



Sources: U.S. Census Bureau TIGER Data, 2000.

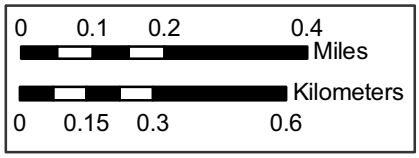
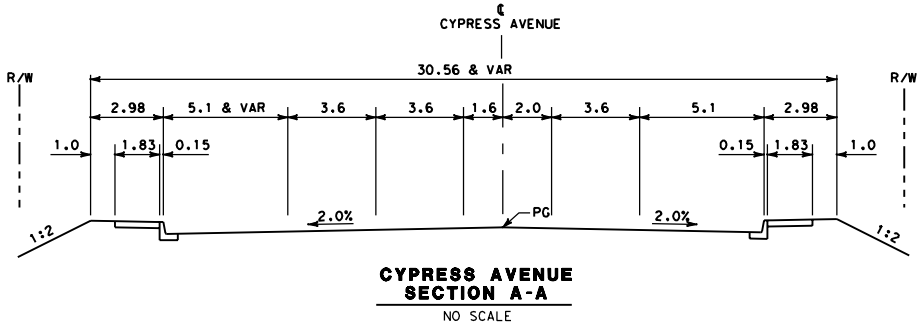
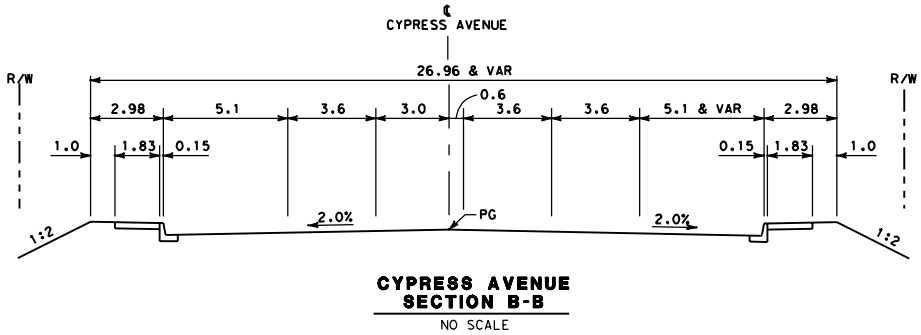


Figure 2
Project Location Map



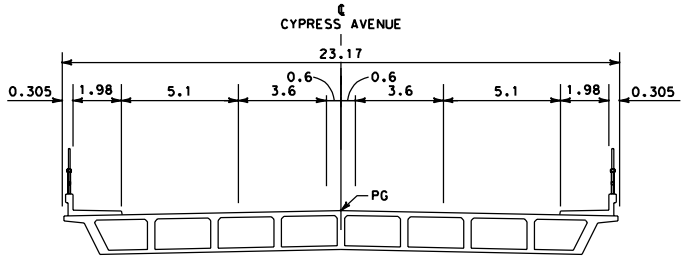
CYPRESS AVENUE
SECTION A-A
NO SCALE

SOUTH OF INTERSTATE 10 AT SLOVER AVENUE



CYPRESS AVENUE
SECTION B-B
NO SCALE

NORTH OF INTERSTATE 10 AT VALLEY BOULEVARD

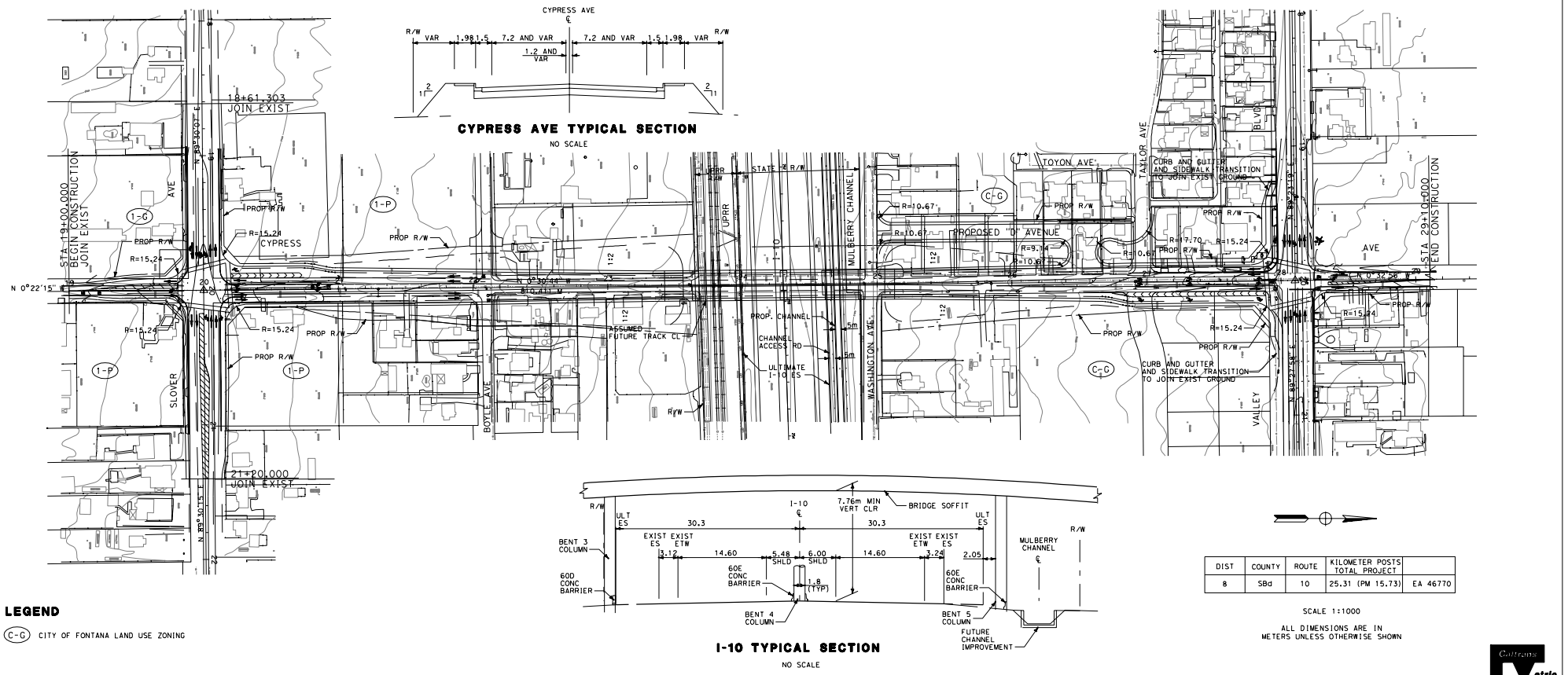


TYPICAL BRIDGE SECTION
CYPRESS AVE OVERCROSSING
NO SCALE

ALL DIMENSIONS ARE IN
METERS UNLESS OTHERWISE SHOWN

Figure 3

Alternative 2 Typical Sections



DIST	COUNTY	ROUTE	KILOMETER POSTS TOTAL PROJECT	
8	SBd	10	25.31 (PM 15.73)	EA 46770

Figure 4

Alternative 2